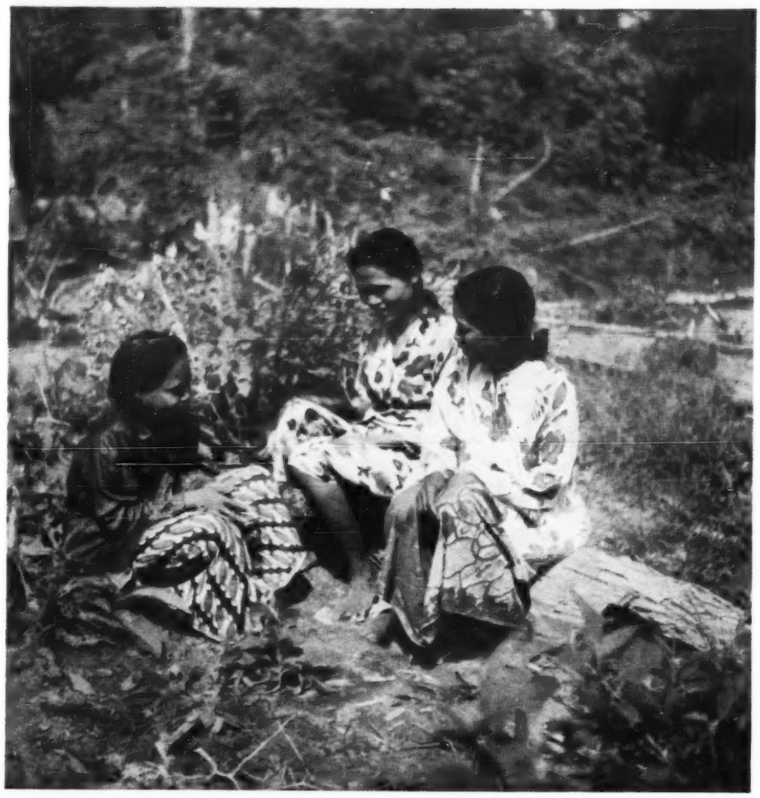
HER MAJESTY QUEEN ELIZABETH THE QUEEN MOTHER.

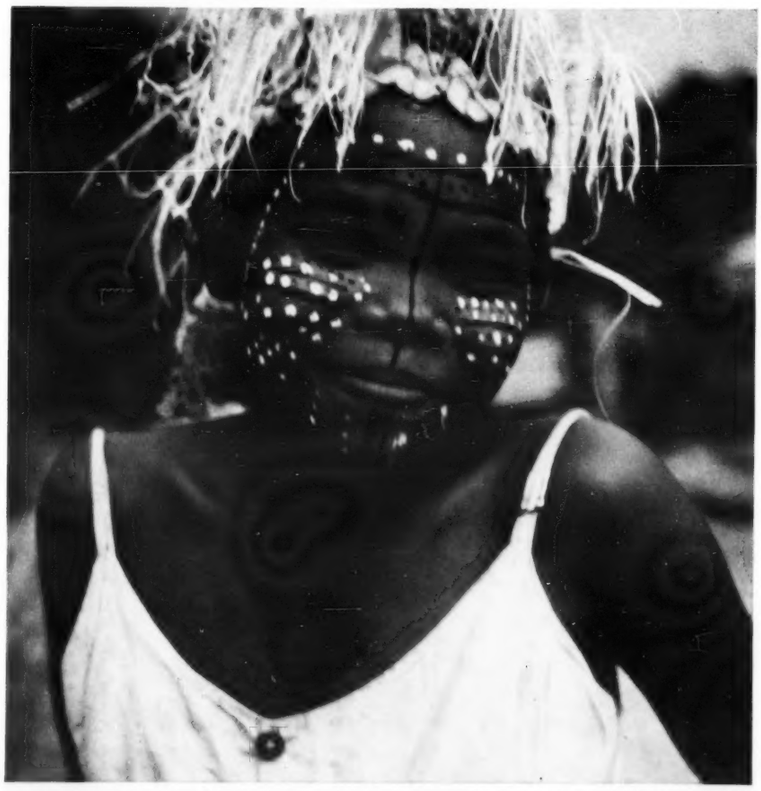
The many public engagements of her Majesty the Queen Mother are constantly enlivened by her great natural charm. In this unposed portrait the camera has succeeded in catching much of the warmth of her smile and her friendliness. During her recent visit to the Federation of Rhodesia and Nyasaland the Queen Mother renewed many old acquaintances and travelled many miles to complete a very full programme. One of the more important events of the visit was the installation of her Majesty as first President of the multi-racial University College of Rhodesia and Nyasaland, the Commonwealth's youngest seat of learning. The Queen Mother is well known for her active interest in intellectual and cultural affairs, and in various charitable organisations. In addition to this new office, her Majesty has been Chancellor of London University since 1955, and is with the Queen a Patron of the Royal Academy of Music and of the Royal College of Music. Above, her Majesty is seen wearing a dress in organza by Mr. Norman Hartnell.

ELEGANT IN SARONGS OF BRIGHTLY-CHECKED MATERIALS AND WITH CROSS BELTS AND FLORAL AND PANDANUS HEAD-DRESSES : ABORIGINES MADE UP FOR A CEREMONIAL DANCE.



RESTING IN A TAPIOCA FIELD WHILE THEIR MEN ARE HUNTING WITH BLOW-PIPES : YOUNG WOMEN OF A LITTLE-KNOWN TRIBE THOUGHT TO BE AN OFFSHOOT OF THE *TEMOQ*.

WITH FACES GAILY PAINTED IN BRIGHT RED : TWO YOUNG ABORIGINAL GIRLS OF THE MALAYAN JUNGLE IN BRILLIANTLY-COLOURED SARONGS.

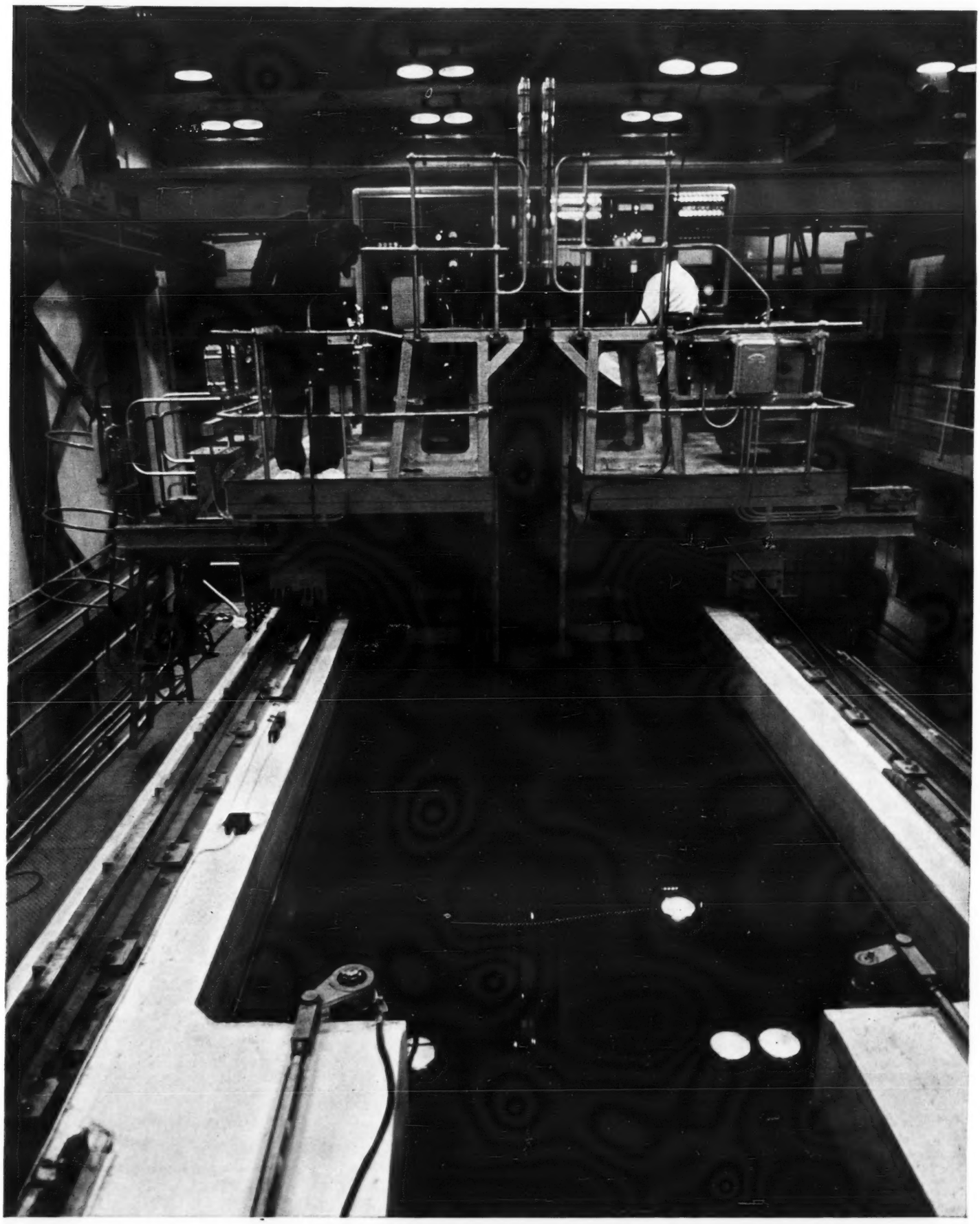


COLOURFULLY DECORATED FOR ONE OF THE CEREMONIAL DANCES, ALWAYS HELD AT NIGHT : A GIRL OF THE *SEMAI SENOI* WITH A HEAD-DRESS OF PLAITED PALM AND FLOWERS.

IN A COUNTRY WHICH GAINS INDEPENDENCE ON AUGUST 31: ABORIGINAL FASHIONS IN THE MALAYAN JUNGLE.

The police and security forces in Malaya come into direct contact with the jungle folk who often occupy a section of Special Air Service and police camps. Our colour photographs illustrate Aboriginal fashions in clothes and facial decoration. Some groups tattoo their faces. The *Semai* of Pahang achieve this with soot off a cooking-pot and thorns of the Bertam palm ; and other groups produce light brown scars by the use of a burning jungle gum. Painting the face in gay colours—red, yellow, black and white—is the rule for festive occasions with all *Senoi* and Negrito groups. Red is obtained from the seeds of the Kesumba shrub—though Western influence has introduced lipstick, obtainable in the towns, to be used as a variant—yellow from the root of the Kunyit, white from lime or pipeclay and black from the latex of a jungle tree. The " make-up " is applied with the finger, a stick or porcupine quill or specially prepared wooden stamps. In some regions both men and women paint their faces, but the more elaborate patterns are a feminine prerogative. For ceremonial dances, head-dresses of plaited palm interspersed with flowers are worn. All Aborigines are proud of their wavy hair, but the urge to improve upon nature can now be satisfied, and jungle ladies have been known to visit a town for a permanent wave. Sarongs in bought cloth are the usual wear, for the old-time bark-cloth, prepared from the pounded inner bark of certain trees, is only used in remote districts. On August 31 the Federation of Malaya will attain independence and enter the Commonwealth. The rights of Malays, in this country in which there are also many Chinese and Indians, are carefully safeguarded in the constitution of the new State. The Duke and Duchess of Gloucester will attend the independence celebrations in Malaya, the Duke as special representative of the Queen.

Photographs in colour by Douglas Pike.



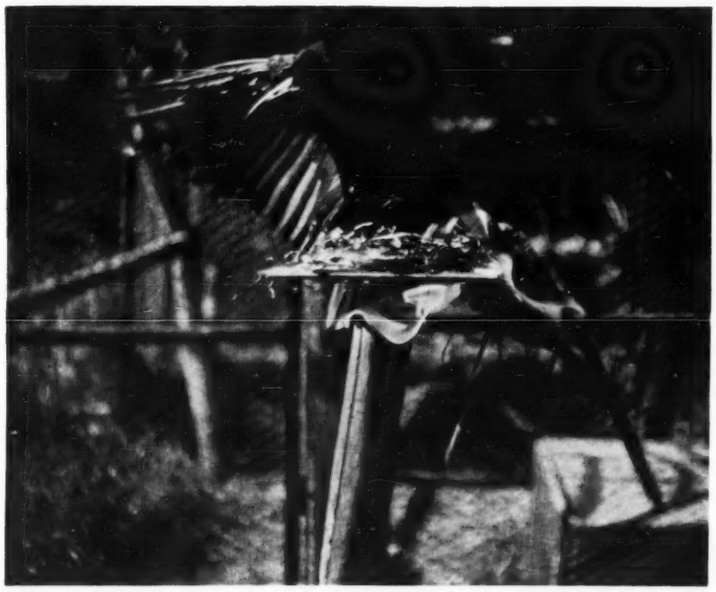
HELPING TO DEVELOP A NUCLEAR MARINE ENGINE: "LIDO," A NEW RESEARCH REACTOR AT HARWELL.

The latest research reactor at Harwell is a swimming-pool-type reactor and is appropriately named "Lido." It first came into operation on the night of September 20-21 last year and is intended primarily for research on anti-radiation protective shielding. "Lido" will play an important part in the development of the propulsion units for the first British nuclear submarine and the first nuclear-powered surface vessels, providing information about the kind of shielding which will be necessary to protect crews from radiation. The reactor is low-powered and the heat and radiation from it are absorbed by the purified water of the "swimming-pool," which can be seen in the illustration. A spectacular feature of the reactor is the Cerenkov radiation — the light blue glow in the pool of water which is caused by the interaction of the radiation with the water atoms. The enriched-uranium fuel elements of the reactor are suspended in the tank of water. The detailed design and construction of the reactor was carried out by a joint Naval and Atomic Energy Research Establishment team, in association with Vickers-Armstrongs (Barrow) Ltd., Ericssons Telephones Ltd., Rolls-Royce Ltd., and Marston Excelsior, and the buildings, including the reactor tank, were constructed by the Ministry of Works.

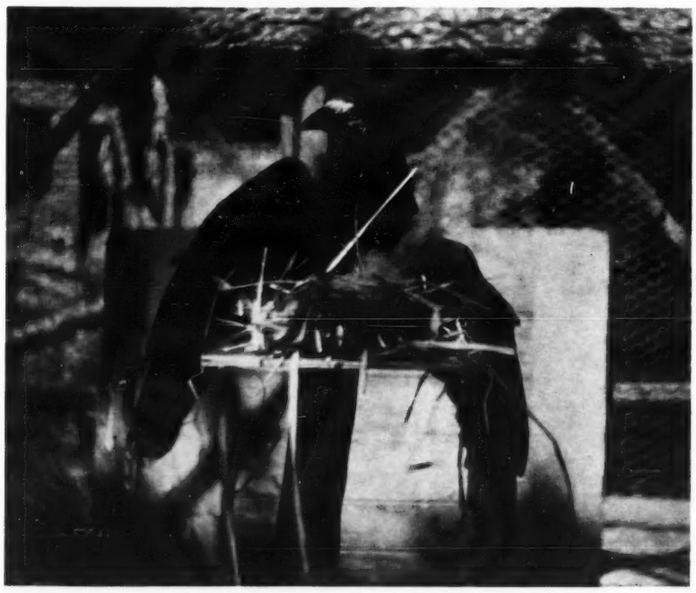
"PHŒNIX REBORN": UNIQUE COLOUR PHOTOGRAPHS OF "ANTING" WITH FIRE.

AS SOON AS THE STRAW IS FIRED, *NIGER* THE ROOK FLIES TO THE PLATFORM AND SPREADS HIS WINGS OVER THE FLAMES IN THE ANTING POSTURE.

SOME OF THE BURNING STRAW FALLS TO THE GROUND; AND THE ROOK FOLLOWS IT AND THERE GOES INTO THE ANTING DISPLAY ONCE MORE.



THE ROOK, HAVING TAKEN A BEAKFUL OF FLAME, ABOUT TO PASS HIS BEAK UP AND DOWN THE INSIDE OF THE FULLY-SPREAD WING.



ALTHOUGH MUCH OF THE ACTION IS RAPID, THERE ARE BRIEF PAUSES IN WHICH THE ROOK HOLDS A STATUESQUE, PHŒNIX-LIKE POSE.

IN *The Illustrated London News* of July 6 this year, photographs were shown which suggested that the legend of the phœnix might be related to a particular behaviour of birds which has been known for some years as anting. In this, a bird can be seen to pick up an ant in its bill, go into a stereotyped posture, and pass the bill rapidly up and down along the inside of the spread wings. The posture includes spreading the wings sideways and forwards and turning the tail to the side and slightly under the body. Anting has also been seen with a number of pungent or aromatic substances taking the place of ants. Such substances include lemon juice, moth-balls, vinegar, cigar-ends and the like. Smoke from chimneys, the heat of a fire and burning

[Continued opposite.

A JAY, MAGNIFICENT IN THE ANTING POSTURE, WITH SPREAD WINGS AND CANTED TAIL, PASSING AN ANT HELD IN ITS BEAK INSIDE THE FORWARD-CURVING WINGS.

Colour photographs by Jane Burton.

Continued.]

materials, as shown here, will also induce anting. The presence of such substances, when a bird is in the mood to ant, seems to be irresistible. When naked flames induce anting, a bird will poise itself over the flames with spread wings and apparently take no harm. The beak fills with saliva, the third eyelid (nictitating membrane) is drawn over the eye, and the fanning action of the wings seems to keep the flames from too close contact with the plumage. It is not yet possible to explain this phenomenon, but many features of the posture and of the movement of the head have much in common with preening movements, and this remarkable display may be no more than a preening action carried out at a high intensity.